

REMARKS

In this Response, claims 1, 8, 11, 13-15, 19, 24-26, 31, 34 and 35 are amended and new claims 38-39 are added. No new matter is introduced by the amendments. Please cancel claims 9, 10, 20, 21, 33 and 37, without prejudice. Accordingly, claims 1, 3-8, 11-15, 17-19, 22-32, 34-36 and 38 are pending in the present application. Applicant respectfully requests reconsideration of the application in view of the above amendments and remarks made herein.

I. Rejections Under 35 U.S.C. § 103

Claims 1, 3-15 and 17-37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,797,007 issued to *Erickson et al.* (hereinafter "*Erickson*") in view of U.S. Patent Application Publication No. 2003/0140308 attributed to *Murthy et al.* (hereinafter "*Murthy*"), for the reasons set forth on pages 2-8 of the Final Office Action.

The independent claims are claims 1, 15 and 26.

Claims 1 and 15 claim, *inter alia*, "automatically generating an index to object instance data if it is determined that a frequency of accessing the object instance data exceeds a predefined threshold".

Murthy teaches that determining the database representation for a given XML schema may involve determining the indexes that are to be used by the database system to store data from XML documents that conform to the given XML schema (see paragraph [0032]). *Murthy* (paragraph [0141]) teaches that columns underlying a XMLType column can be referenced using either a object notation or a XML notation in the CREATE INDEX statements. *Murthy* (paragraph [0216]) teaches that the database server is able to create indexes on and partition XML tables based on XML data.

That is, *Murthy* merely teaches that indexing can be used by a database system to store data from XML documents that conform to a given XML schema.

A database system *generating indexes on XML tables based on XML data*, as taught by *Murthy*, is not analogous to "generating an index to object instance data if it is

determined that a frequency of accessing the object instance data exceeds a predefined threshold", as claimed claims 1 and 15. Consider that *Murthy* does not teach a frequency of accessing the object instance data, much less determining if a frequency of accessing the object instance data exceeds a predefined threshold, as essentially claimed in claims 1 and 15.

Erickson does not teach how database indexes may be implemented; indeed, *Erickson* does not even mention indexes. Therefore, *Erickson* fails to cure the deficiencies of *Murthy*.

The combination of *Erickson* and *Murthy* teaches that indexing can be used to store data from XML documents and that a database server can create indexes on and partition XML tables based on XML data. The combination of *Erickson* and *Murthy* fails to teach or suggest "automatically generating an index to object instance data if it is determined that a frequency of accessing the object instance data exceeds a predefined threshold", as claimed claims 1 and 15.

Therefore, for at least the above reasons, claims 1 and 15 are believed to be patentable and non-obvious over the combination of *Erickson* and *Murthy*. Applicants respectfully submit that inasmuch as claims 3-8 and 11-14 are dependent on claim 1, and claims 17-19 and 22-25 are dependent on claim 15, and claims 1 and 15 are patentable over the cited references, claims 3-8, 11-14, 17-19 and 22-25 are patentable as dependent on patentable independent claims. Withdrawal of the instant rejections is respectfully requested.

Claim 26 claims, *inter alia*, "an index creation module for automatically generating an index to object instance data based on access history".

Murthy teaches that indexing can be used by a database system to store data from XML documents that conform to a given XML schema (see paragraph [0032]). A database system that is able to create indexes on XML tables *based on XML data*, as taught by *Murthy*, does not teach or suggest "generating an index to object instance data based on access history", as claimed.

Erickson does not teach or suggest indexing. Therefore, *Erickson* fails to cure the deficiencies of *Murthy*.

The combination of *Erickson* and *Murthy* teaches that indexing can be used by a database system to store data from XML documents. The combination of *Erickson* and *Murthy* fails to teach or suggest "generating an index to object instance data based on access history", as claimed in claim 26.

Therefore, for at least the above reasons, claim 26 is believed to be patentable and non-obvious over the combination of *Erickson* and *Murthy*. Applicants respectfully submit that inasmuch as claims 27-36 are dependent on claim 26, and claim 26 is patentable over the cited references, claims 27-36 are patentable as dependent on a patentable independent claim.

In view of the foregoing, the rejections under 35 U.S.C. § 103(a) should be withdrawn.

II. New Claims

With regard to new claims 38 and 39, Applicants respectfully submit that *Erickson* and *Murthy*, alone or in combination, do not teach or suggest "automatically measuring a frequency of accessing the instance of the object and, if it is determined that the measured frequency is above a preset threshold, storing the instance of the object in a cache", as recited in claim 38, or "automatically measuring a frequency of searching by values of a property of the object", as recited in claim 39.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Issuance of a Notice of Allowance is respectfully requested.

Respectfully submitted,

Dated: January 14, 2008

/William J. Hoofe IV/
William J. Hoofe IV
Reg. No. 54,183
Attorney for Applicant

F. CHAU & ASSOCIATES, LLC
130 Woodbury Road
Woodbury, New York 11797
Tel: (516)-692-8888
Fax: (516)-692-8889